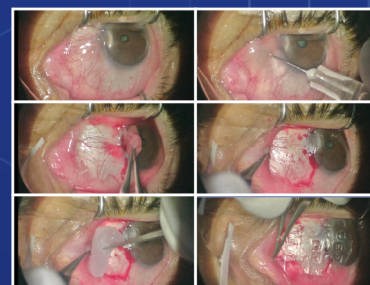


# SUTURELESS, GLUELESS PTERYGIUM SURGERY TECHNIQUE

- Pterygium is a benign fibrovascular proliferative condition of the ocular surface that extends from the bulbar conjunctiva onto the surface of the cornea. The only currently available treatment is surgical removal of the lesion. Different surgical techniques for pterygia removal include bare sclera, conjunctival autograft, simple closure, and amniotic membrane.
- A sutureless, glueless technique utilizing decellularized basement membrane with pterygia excisions has recently been used.<sup>1,2</sup> The procedure involves a pterygia excision with the conjunctival defect being closed with amniotic membrane placed on the scleral bed.
- A novel variation of the technique uses a 3-layer decellularized basement membrane (Biovance® 3L Ocular) as a protective cover following pterygia excision. This technique uses mitomycin C, tucks the graft under the residual conjunctival edges, applies a corneal bandage contact lens, and a patch.<sup>1</sup>



## Pterygium Technique Using Biovance 3L Ocular Decellularized Basement Membrane

### No Sutures; No Glue

- Using blunt dissection, separate the head of the pterygium at the limbus, and remove from the corneal surface.
- Perform a peritomy from the limbus. Leave the requisite amount of conjunctival tissue to allow for a tissue flap over the edge of the membrane once placed.
- Perform diamond burr polishing of the cornea to remove any corneal irregularity.
- Perform cautery as needed to prevent bleeding within the scleral bed.
- A sponge soaked with 0.2%-0.4% mitomycin C is applied to the bare sclera and/or to the Tenon's capsule surrounding the excised area. It is kept in situ for 2 minutes and then thoroughly rinsed out with balanced salt solution.
- Using a Weck-Cel, thoroughly dry the scleral bed prior to placing the graft, making sure to dry underneath the conjunctival flap as well.
  - NOTE: Any planned post-op antibiotic or steroid injections should be performed prior to drying the scleral bed and applying the graft.
- Place the Biovance 3L Ocular graft over the corneal defect (2-3mm) and extend the graft onto the dry scleral bed.
  - NOTE: No tissue glue or sutures are required. If the scleral bed is dry, the graft will firmly adhere.
  - If using the 15x20mm rectangle, place with the longer side extending medial/lateral.
- Leave enough excess graft hanging over the edge of the conjunctival flap to tuck underneath the conjunctival flap.
- Tuck the Biovance 3L Ocular graft 2mm under the distally undermined conjunctiva. Do not attempt to fold the graft to form a pocket that fits both underneath and above the conjunctiva as this will allow fluid under the graft and prevent adherence. If necessary, trim the edges of the graft to size.
- Using forceps, pull the conjunctival flap over the edges of the Biovance® 3L Ocular decellularized basement membrane.
- Use a Weck-Cel to gently press down on the graft to ensure it is completely flat and smooth against the corneal/scleral bed surface.
- Place a standard 14mm bandage contact lens (8.8 or higher base curve is recommended). The BCL should provide coverage of the corneal defect created from the excision and extend laterally over the edges of the membrane.
  - \*Do not use any antibiotic ointment. Antibiotics may be injected subconjunctivally prior to drying the cornea and applying the graft or soaked into the BCL prior to placement.
- Place a pressure patch over the eye.
- See the patient back at post-op day 1-2 days to remove the patch.
- Keep the BCL on until their follow up visit in a week.



**Watch this  
technique  
in action**

## Key Benefits<sup>1</sup>

- Sutures are prevalent for autograft fixation but can lengthen operating time, post-op discomfort, inflammation, and scarring.
- Fibrin glue is used extensively for simple graft attachment and faster surgical times but also comes with high cost and risk of infection transfer and inflammation.
- Using a sutureless, glueless technique with Biovance 3L Ocular may offer advantages over other surgical techniques including:
  - A comfortable post-op period for patients
  - Improved cosmetic appearance
  - Preservation of the healthy conjunctiva which would be excised during an autograft procedure.
  - Allows for rapid normalization of patient lifestyle and productivity
  - Shortened surgical time
  - Avoidance of glue reduces risk of infection
  - Lower surgical cost due to not using glue

### Indications for use

BIOVANCE 3L Ocular is an allograft intended for use as a biological membrane covering that provides an extracellular matrix. As a barrier membrane, BIOVANCE 3L Ocular is intended to protect the underlying tissue and preserve tissue plane boundaries. Applications include, but are not limited to, corneal and conjunctival related injuries or defects such as corneal epithelial defects, pterygium repair, fornix reconstruction, and other procedures.

### Important Safety Information

BIOVANCE 3L Ocular is contraindicated in patients with a known hyper-sensitivity to BIOVANCE 3L Ocular. If a patient has an adverse reaction related to the use of BIOVANCE 3L Ocular, immediately discontinue its use. BIOVANCE 3L Ocular should not be used on clinically infected wounds. The pouch contents are sterile if the pouch is unopened and undamaged. Do not use if package seal is broken. Discard material if mishandling has caused possible damage or contamination. Do not resterilize. BIOVANCE 3L Ocular must be used prior to the expiration date on the product pouch. BIOVANCE 3L Ocular should not be used together with a collagenase product on the wound.

1.Rivera-Morales P. et al; Surgical Time and Postoperative Symptoms Study in Pterygium Excision and Amniotic Membrane Graft Using Celularity Triple Layer Dehydrated Amniotic Membrane; Clin Ophthal; June 2023; <https://doi.org/10.2147/OPHT.S410452>. 2.Choudhary U, Aseem A. Sutureless and Glueless Amniotic Membrane Graft in Primary Pterygium Surgery. A Prospective Study. Int J Sci Stud 2017;5(9):84-87.